

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,400	08/11/2000	Venkataraman Ramanathan	204861	7300
23460	7590	08/09/2004	EXAMINER	
LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6780			EL CHANTI, HUSSEIN A	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/637,400	RAMANATHAN ET AL.
	Examiner	Art Unit
	Hussein A El-chanti	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 June 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-23 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. This action is responsive to after final amendment received on June 25, 2004. Claims 1-23 are pending examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 22 and 23 are rejected under 35 U.S.C. 101 because both claims do not have any practical use. The claims only list a set of instructions that are saved on a computer readable medium with no function or use.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 6, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The set of instructions listed in the above mentioned claims do not appear to have a data structure format as commonly known by one of the ordinary skill in the art.

Claims 5, 6, 15 and 16 are dependent on claim 1 which is a method claim. Claims 5, 6, 15 and 16 do not teach a method or a step in a method and therefore does not further limit the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile et al, U.S. Patent No. 6,298,380 (referred to hereafter as Coile).

As to claims 1, 11, and 18, Coile discloses a system and method for improving resource utilization in a TCP/IP connection management system that teaches:

- closing a TCP/IP connection to create a timed-wait state (see col. 13 lines 50-62)
- excluding information from the TCB not required to identify the client connection to form a timed-wait state TCB for a time wait period (see col. 13 lines 15-col. 14 lines 18); and
- releasing of memory containing the information required to service the client connection (see col. 15 lines 61-col. 16 lines 17).

Coile does not explicitly teach a timed wait. However Coile teaches a method where the connection waits until the client has acknowledged all the received packets (see col. 13). It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Coile by using a

timed wait because doing so would result in the same function which is to wait until all the received packets were acknowledged by the client.

As to claims 2, 12, and 19 Coile further teaches the step of excluding comprises the step of copying the information required to identify the client connection to form the TWTCB (see col. 13 lines 35-col. 14 lines 18).

As to claim 3 and 20, Coile further teaches releasing the memory includes the step of releasing the TCB required to identify the client connection (see col. 15 lines 61-col. 16 lines 17).

As to claim 4, Coile further teaches maintaining a minimum of information necessary to avoid late-routed packets forming new connections on the server (see col. 15 lines 61-col. 16 lines 17).

As to claims 5-10, 13-16 and 21, Coile et al further teaches excluding information not required to identify the client connection comprises the step of forming a TWTCB that occupies less memory than the, TCB (column 9, lines 5-12). The smaller connection object described by Coile et al is equivalent to the TIMED WAIT transmission control blocks described by the claims, and could be coded as described by claims 5, 6, 15, 16, 22, or 23 by anyone of ordinary skill in the art. These coded structures yield the smaller sized TWTCBs claimed in claims 8, 9, 10, 13, 14, and 21, as described in the specification. Therefore, these TWTCBs fall within the scope of Coile et al's smaller connection object.

As to claim 17, Coile teaches the method of claim 11 wherein the step of forming a TWTCB comprises the step of copying a portion of the information of

Art Unit: 2157

the TCB, the portion of information being insufficient to service the TCP/IP connection (see col. 13 lines 15-col. 14 lines 18).

5. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new grounds of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A El-chanti whose telephone number is (703)305-4652. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 30, 2004



Ario Etienne
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100